

Regulation

Glyphosate has been registered for use in at least 130 countries (Dill et al., 2010). In the United States it is currently classified by the US EPA as Group E for carcinogenicity (showing lack of carcinogenicity for humans) on the basis of a 1991 evaluation. All US uses are eligible for registration on the basis of a finding that glyphosate “does not pose unreasonable risks or adverse effects to humans or the environment” (US EPA, 1993). A review conducted in 2001 in connection with the registration process in the European Union similarly concluded that there was no evidence of carcinogenicity (European Commission, 2002).

Nevertheless, as worldwide adoption rates of herbicide-resistant crops and the use of glyphosate have risen in recent years (Duke and Powles, 2009), restriction of glyphosate use has been enacted or proposed in several countries. Documented actions are few. These include a restriction of use by consumers and of use in certain public areas beginning in 2015 and 2017, respectively, in the Netherlands (reference). In 2013, the Legislative Assembly of El Salvador voted a ban on the use of pesticides containing glyphosate in 2013 (República de El Salvador, 2013). Sri Lanka is reported to have instituted a partial ban based on an increasing number of cases of chronic kidney disease among agricultural workers, but to have lifted it two months later (ColomboPage, 2014). Such actions have arisen from a number of viewpoints, including due to the development of resistance among weed species as well as due to health concerns.

References

Dill GM, Sammons RD, Feng PCC, Kohn F, Kretzmer K, Mehrsheikh A, et al. (2010). Chapter 1: Glyphosate: discovery, development, applications, and properties. In: Nandula VK, editor. Glyphosate Resistance in Crops and Weeds: History, Development, and Management. Hoboken, NJ, USA: Wiley; pp. 1–33. ISBN: 978–0470410318.

Duke SO, Powles SB. 2009. Glyphosate-Resistant Crops and Weeds: Now and in the Future. *AgBioForum* 12: 346-357.

European Commission (2002). Review report for the active substance glyphosate. 6511/VI/99-final. 21 January 2002.
http://ec.europa.eu/food/plant/protection/evaluation/existactive/list1_glyphosate_en.pdf (accessed 29 April 2015).

US EPA (1993). Reregistration Eligibility Decision (RED): Glyphosate; EPA-738-R-93–014; U.S. Environmental Protection Agency, Office of Prevention, Pesticides, and Toxic Substances. Washington (DC): Office of Pesticide Programs, U.S. Government Printing Office.

András Székács and Béla Darvas (2012). Forty Years with Glyphosate, Herbicides - Properties, Synthesis and Control of Weeds, Dr. Mohammed Nagib Hasaneen (Ed.), ISBN: 978-953-307-803-8, InTech, Available from: <http://www.intechopen.com/books/herbicides-properties-synthesis-and-control-of-weeds/forty-years-withglyphosate>

Sri Lanka lifts ban on sale of glyphosate. Tue, May 13, 2014, 12:13 am SL Time, ColomboPage News Desk, Sri Lanka. http://www.colombopage.com/archive_14A/May13_1399920230CH.php

República de El Salvador (2013). Asamblea Legislativa Decreto D.L. Nº 473, 5 DE SEPTIEMBRE DE 2013.

<http://www.asamblea.gob.sv/noticias/archivo-de-noticias/asamblea-legislativa-aprueba-reformas-que-prohiben-pesticidas-que-danan-la-salud>. Accessed 28 April 2015.

WHO. Data Sheets on Pesticides: Glyphosate, WHO/PCS/DS/96.91. International Programme on Chemical Safety, World Health Organization, Food and Agriculture Organization: Geneva, Switzerland, 1996.